

Exhibit L3

The effects of BANG® energy drink on psychomotor vigilance

Christopher Horn¹, Madaline Kenyon¹, Cassandra Carson¹, Anya Ellerbroek¹, Lia Jiannine¹, Tobin Silver¹, Corey Peacock¹, Jaime Tartar², Jose Antonio¹

¹Exercise and Sport Science, NSU Florida, Davie FL

²Department of Psychology and Neuroscience, NSU Florida, Davie FL

Design

- Double-blind, placebo-controlled, crossover trial.
- N=20
 - 11 men
 - 9 women
- NOTE: BANG contains 300 mg of caffeine
- Thirty minutes after consuming the drink, each subject performed the motor praxis, push-ups and psychomotor vigilance task.
- 7-day washout between tests
- Note: the placebo tasted similarly; however, it had no caffeine, creatine, or BCAA.



Take home message

BANG energy drink resulted in a significantly lower (i.e., faster) ($p < 0.05$) psychomotor vigilance mean reaction time versus the placebo as well as fewer lapses.

Subject Characteristics

- Twenty exercise-trained men ($n=11$) and women ($n=9$)
- Data are mean \pm SD
- Age 32 ± 7 years
- Height 169 ± 10 centimeters
- Weight; 74.5 ± 14.5 kilograms
- % body fat 20.3 ± 6.2 %
- Years of training 14 ± 9
- Daily caffeine intake 463 ± 510 milligrams

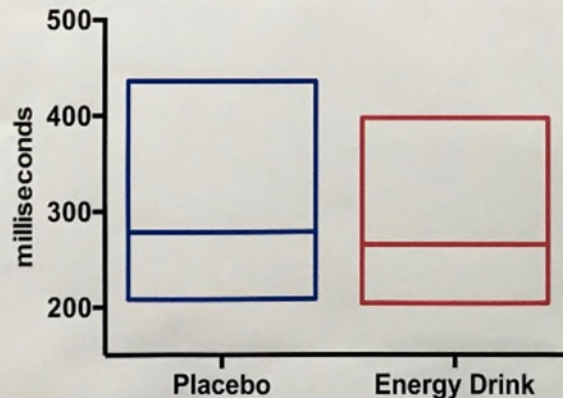


Figure 1. Psychomotor Vigilance Task
Middle line is the mean. The top and bottom are the min to max. Y-axis is reaction time.
The scores are like golf; a lower score is better ☺

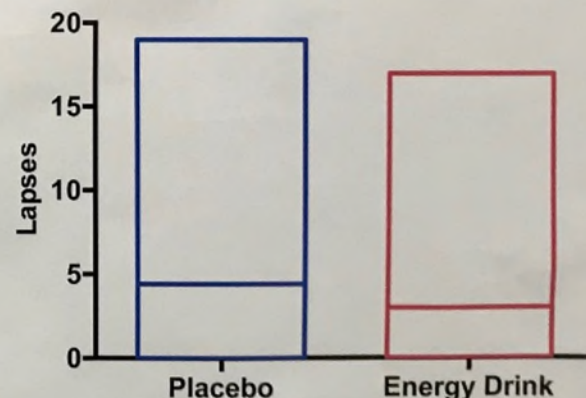


Figure 2. Lapses
Middle line is the mean. The top and bottom are the min to max. A "lapse" is defined as failure to respond or a reaction time > 500 msec

THANKS to VPX for providing the BANG and placebo drinks